

**AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the present application.

**Listing of Claims:**

1. **(Currently Amended)** A An automatic method for the characterisation of physical and/or chemical properties of a liquid, said method comprising:

1) measuring at least one dependent physical and/or chemical property of a liquid in a measuring cell as a function of temperature and a component concentration as independent variables,

2) determining by calculation the values for the component concentration in the measuring cell based on data from a control program for the change of component concentration and determining the temperatures by calculation from a temperature control program or by measurements;

3) changing the value of the component concentration in the measuring cell by adding in one step or gradually a predetermined amount of another liquid containing a different component concentration into the measuring cell according to a component concentration control program, and performing a representative number of measurements of the dependent physical or chemical property in the measuring cell within a whole selected temperature range within the predetermined change of the component concentration,

4) repeating the procedures above at desired component concentrations and temperatures in order to obtain a wanted number of values;

5) the values obtained for the dependent properties are combined with the values for the independent properties to measuring points and stored electronically in a computer; and

6) coordinating and visualizing the electronically stored measuring points in a three-dimensional diagram.

2. **(Previously Presented)** The method according to Claim 1, wherein a series of measurements are done under rising temperature, and the following series of measurements are done under decreasing temperatures.

3. **(Previously Presented)** The method according to Claim 1, wherein according to the component concentration control program one portion of the liquid is removed from the measuring cell and the same volume of the another liquid containing a different concentration of the component is thereafter added to the measuring cell.

4. **(Previously Presented)** The method according to Claim 1, wherein the changes in concentration and/or the temperature are controlled by a program in the computer.

5. **(Previously Presented)** The method according to Claim 1, wherein the temperature of each measuring point is measured simultaneously with the physical and/or chemical property.

6. **(Previously Presented)** The method according to Claim 1, wherein the predetermined amount of the another liquid added to the liquid amends the concentration of the component in the liquid with 0.01-5 % by weight.

7. **(Previously Presented)** A device for the characterisation of the physical and/or chemical properties of a liquid, wherein said device comprises:

a) a measuring cell (1) provided with

i) an equipment (2) for the homogenisation of a liquid,

ii) at least two control equipment (3, 17), which comprise or are attached to control programs for changing of the two independent variables, component concentration and temperature, in a predetermined manner, the control equipment (3) of the component concentration comprising a dosage organ for the addition of another liquid containing a different component concentration to the measuring cell,

iii) at least one measuring organ (9, 13, 14) for the determination of at least one dependent physical and/or chemical property of the liquid, and

iv) optionally a measuring organ (15) for the determination of the temperature,

b) at least one computer (5) for

i) the reception and storage of data relating to the dependent and independent variables via at least one electronic circuit (11', 12', 13', 14', 15') and the calculation of at least the component concentration from data obtained from the control program and

ii) compilation of the received and calculated values into three-dimensional measuring points, and

c) equipment (16) for visualisation of the measuring points stored in the computer in a three-dimensional diagram.

8. **(Previously Presented)** The device according to Claim 7, wherein the equipment for the control of the temperature of the fluid comprises a jacket (17) or a heating coil for the cooling and/or heating by means of a heat transfer medium, whereby cooling and heating is controlled by a program in the computer (5).

9. **(Currently Amended)** The device according to Claim 8, wherein the equipment (3) for the control of component concentration ~~has~~ further comprises one or several dosing organs for the withdrawal from and injection to the measuring cell of the same amount of the fluids but with different concentrations, whereby amounts are controlled by a program in the computer (5).

10. **(Previously Presented)** The device according to Claim 7, wherein control programs are included in the computer (5).

11. **(Previously Presented)** The method according to Claim 1, wherein a series of measurements are done under decreasing temperature, and the following series of measurements are done under rising temperatures.

12. (New) The method according to Claim 1, wherein the at least one dependent physical and/or chemical property of the liquid that is measured in the measuring cell is selected from the group consisting of pH, conductivity, turbidity, optical activity and viscosity.

13. (New) The method according to Claim 1, wherein the dependent physical and/or chemical properties of the liquid that are measured in the measuring cell is turbidity and one or more selected from the group consisting of pH, conductivity, optical activity and viscosity.

14. (New) The method according to Claim 1, wherein the concentration is gradually changed to change the value of the component concentration.

15. (New) The method according to Claim 1, wherein the temperature is continuously changed.

16. (New) The method according to Claim 13, wherein the temperature is continuously changed.

17. (New) The device according to Claim 7, wherein said iii) at least one measuring organ is a conductivity meter or pH meter.

**Application No. 09/381,828**

**Attorney Docket No.: 2964-0102P**

**Art Unit 1743**

**Reply to Office Action of September 28, 2005**

18. (New) The method according to Claim 1, wherein the concentration is gradually changed to change the value of the component concentration and the temperature is continuously changed.